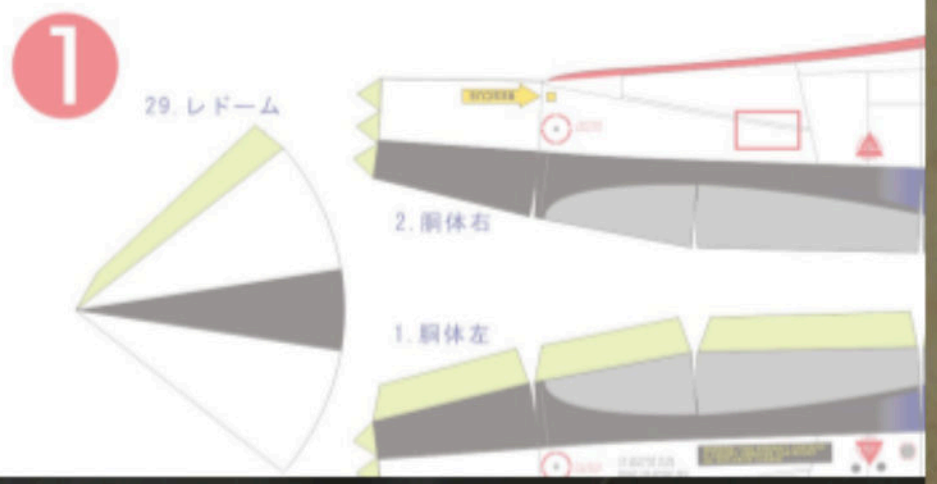
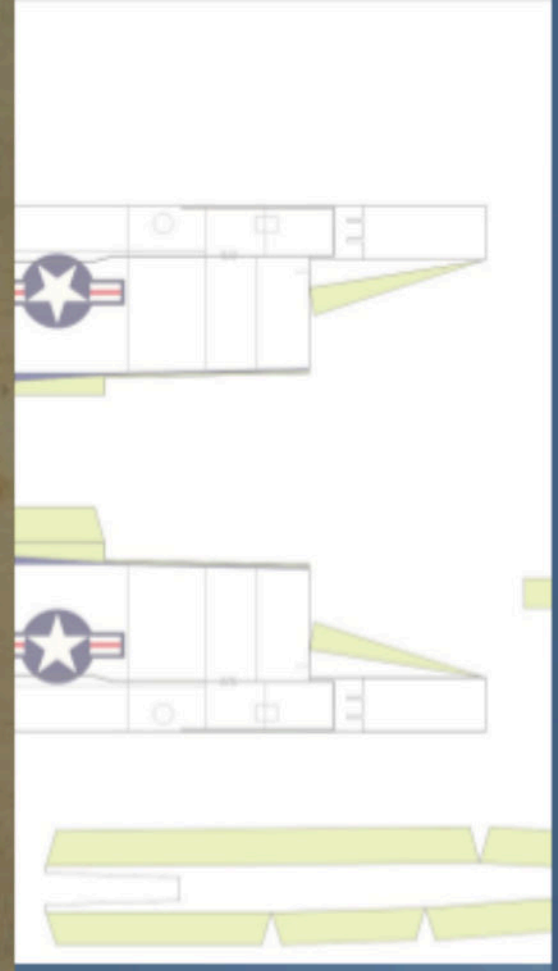
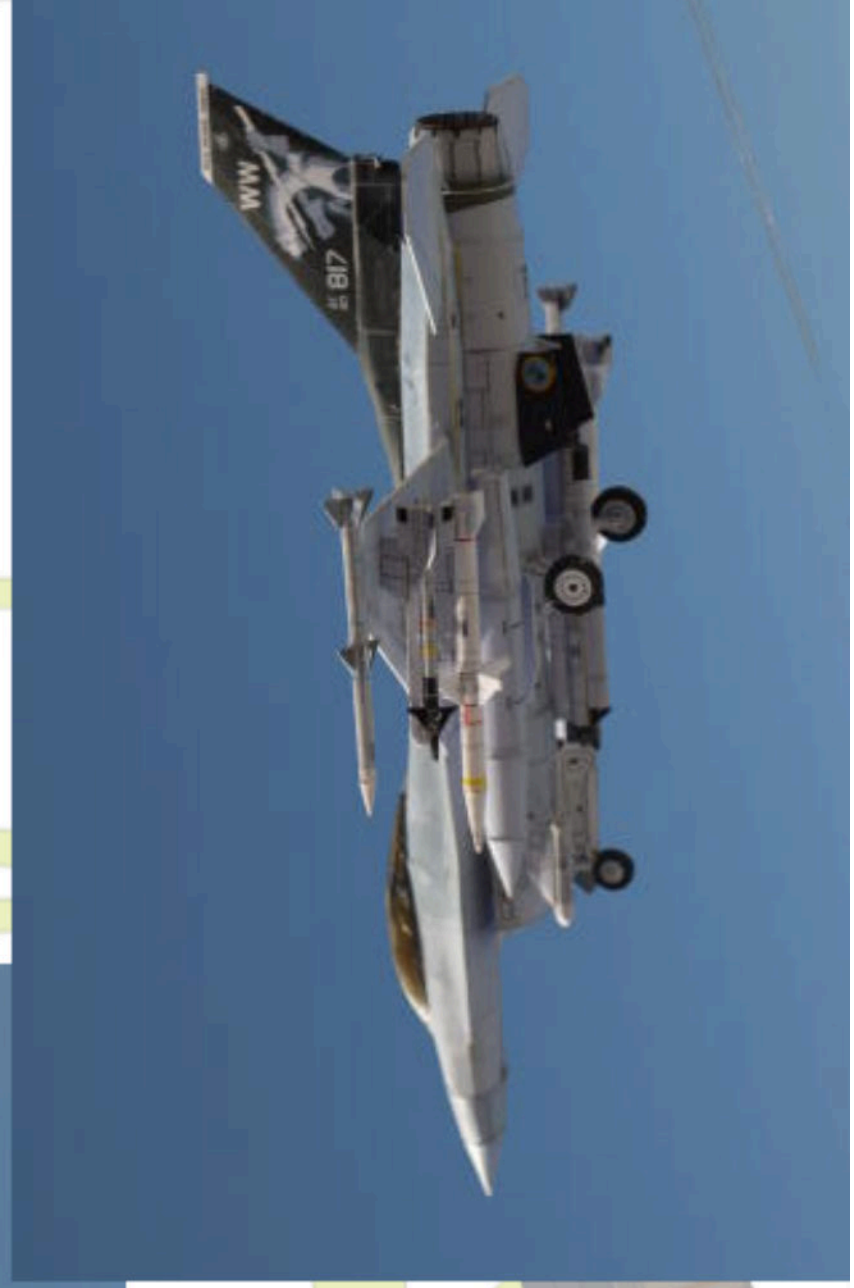
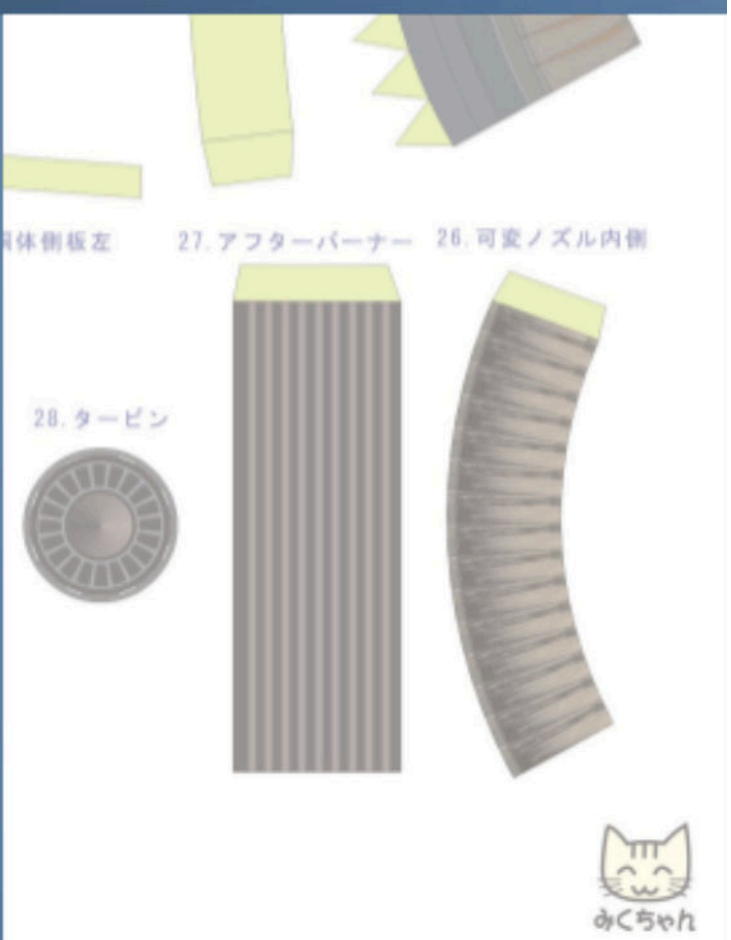
ジェネラル ダイナミクス YF-16

General Dynamics YF-16









U.S. AIR FORCE

How to make F-16 paper model

みくちゃん

I'm Miku-chan.

・YF-16 2023 New Year's model.

I thought I would make an F-16 this year. The F-16 is used in many countries and has many variations, making it a fun aircraft to model. We plan to make various paints and types of airframes. I tried to start with the YF-16, but the blended wing body, which is a major feature of the F-16's appearance, was a difficult task. In order to maintain the quality of the appearance, the upper surface of the fuselage was divided into two parts, left and right. I have some ideas for countermeasures, but I couldn't verify and incorporate them in time. I hope that it will be realized with the F-16C, etc., which is planned in the future.

When I first saw a photo of the YF-16, I was amazed at its innovative design. It looked smart and very futuristic. One of them is a canopy without a window frame. It's a beautiful water drop shape, and if you make it with a heat press, you can make it without problems. However, if it is paper, the rough steps will stand out. I wanted to make the silhouette smooth somehow, so I decided to divide it vertically. In terms of shape, the parting line is conspicuous, although it was managed somehow. Please make it less noticeable by painting it in the same color.

・F-16CJ It is a model commemorating the 14th anniversary of the opening of the TSMC homepage.

I thought it would be possible to make minor changes based on the YF-16, but there were almost no parts that could be used as is, so it was redesigned. Therefore, there is a change in the composition of parts. It is a model that is difficult to make no matter how many times it is made. I tried to make it as easy as possible, but this is the limit. After that, I would like to expect the skill and inspiration of the modeler. Please let us know if you have any questions or concerns. The planned F-2 and F-16I will be postponed until the end of this year.

□ General precautions

1. Cut out the parts as accurately as possible. However, there is no problem with a slight derailment of the glued portion.

2. Accurately align the outer shape and panel line when gluing to ensure there is no misalignment.

3. Secure adhesion. But be careful not to contaminate the surface with the glue.

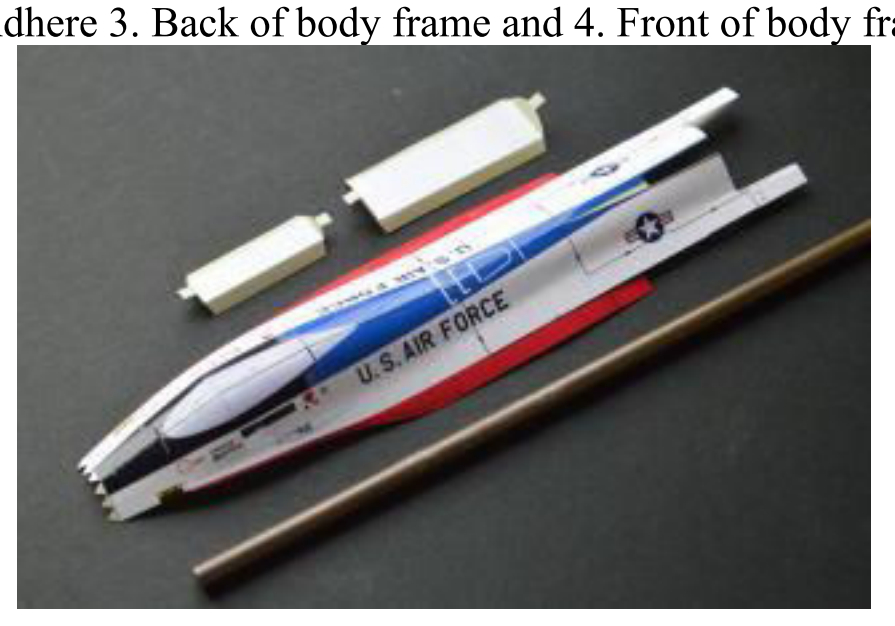
4. The production example was made with Kokuyo's thin photo paper for inkjet with a thickness of t 0.15 mm.

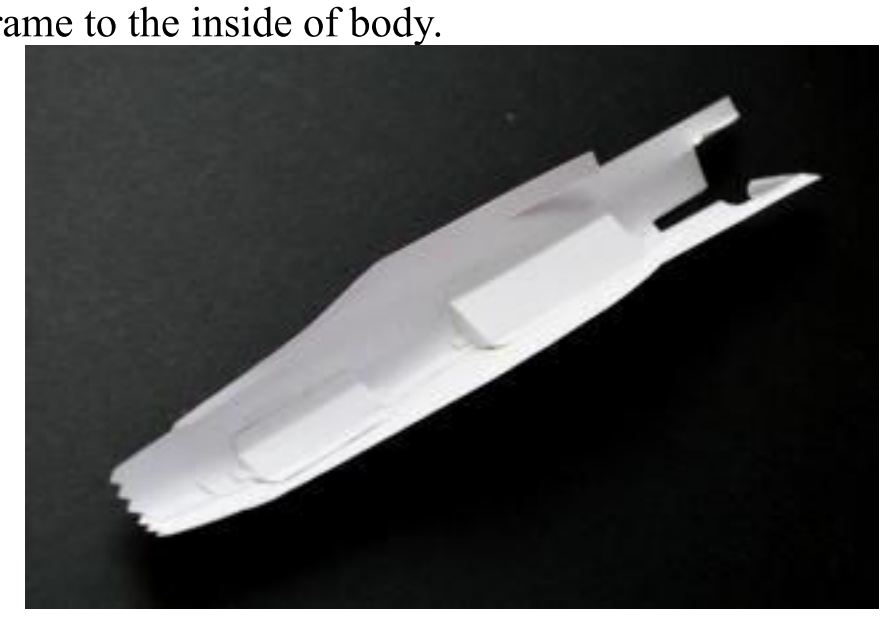
(It is recommended that the coat on the surface is hard to break.) If you use thick paper, there are parts that are difficult to bend.

□ Assembly procedure

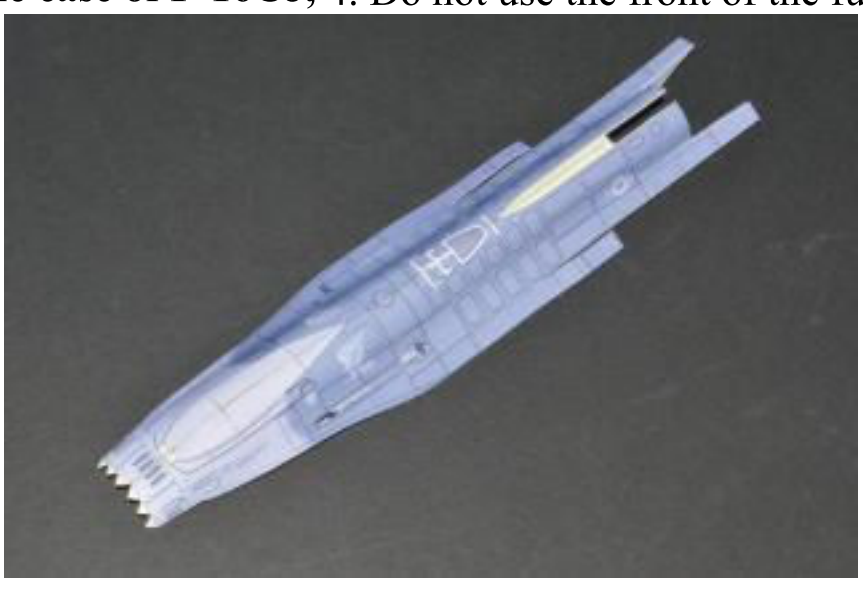
1. 1.Left body, 2.Right body cut out and rounded. Using a round stick, etc., make a convex shape in the center and a concave shape at the base.
At that time, make a sharp valley fold about 4 mm from the outer edge of the arrowed part. Also, make a notch in the place of the photo. (Cut Here Lne, 23mm)
Glue the top seam.

2. Adhere 3. Back of body frame and 4. Front of body frame to the inside of body.

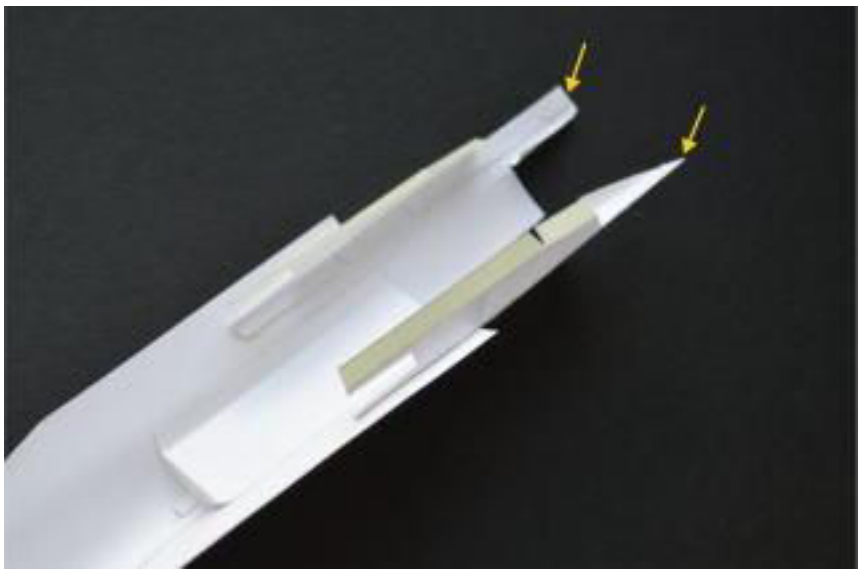




In the case of F-16CJ, 4. Do not use the front of the fuselage frame.



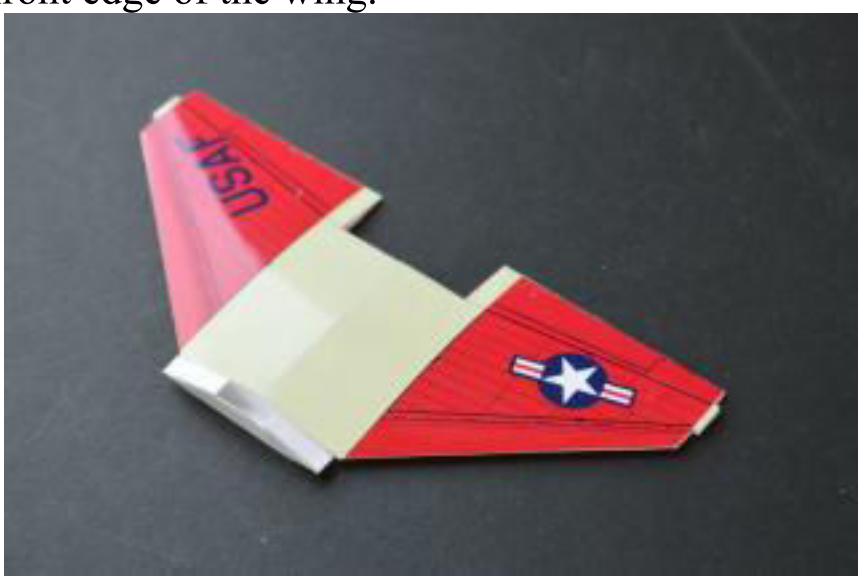
3. Cut out and bend 5. left fuselage side plate and 6. right fuselage side plate. Glue it to the underside of the torso. Align the rear end of the arrow.



4.7. Cut out the main wing and add a bend to the upper surface only. (The bottom surface is flat.) 8.Glue the main wing frame to the inside of the main wing, and then glue the seaweed on the main wing. 8. The shape of the main wing frame is different in

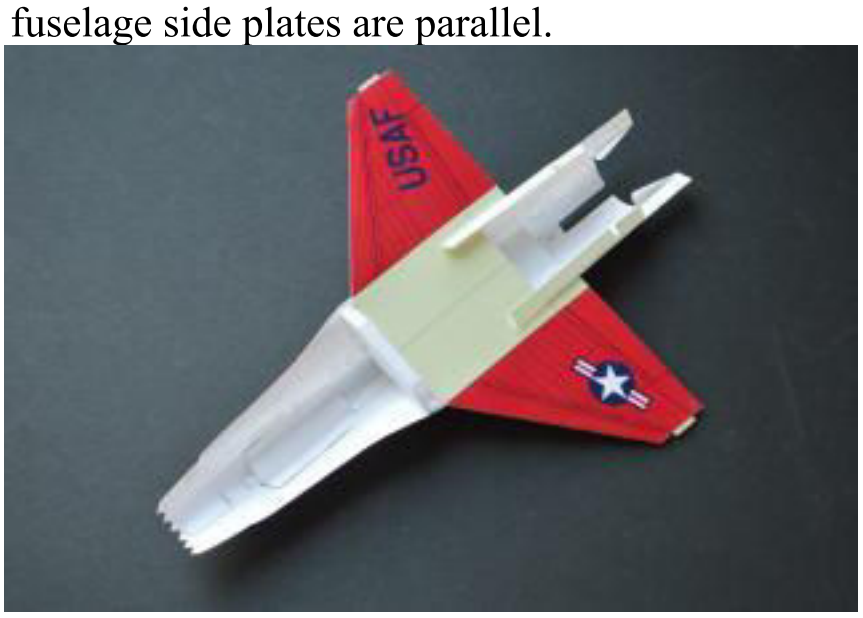
F-16CJ .

5.9. Assemble the wing fuselage guide and glue it to the front edge of the wing.

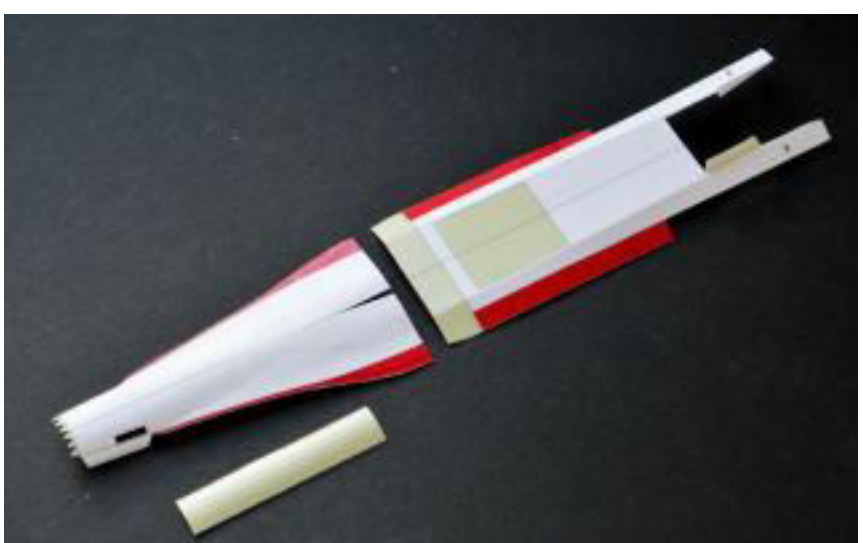


6. Attach the main wing to the fuselage. The fore-and-aft position of the main wing is determined by aligning the rear end of the arrow. The width of the fuselage is glued so that it fits perfectly with the width of the main wing. You will have to work against the repulsive force of the paper.

Glue the edge of the main wing notch to the fuselage side plate. Easy to use with instant glue. It is OK if the left and right fuselage side plates are parallel.



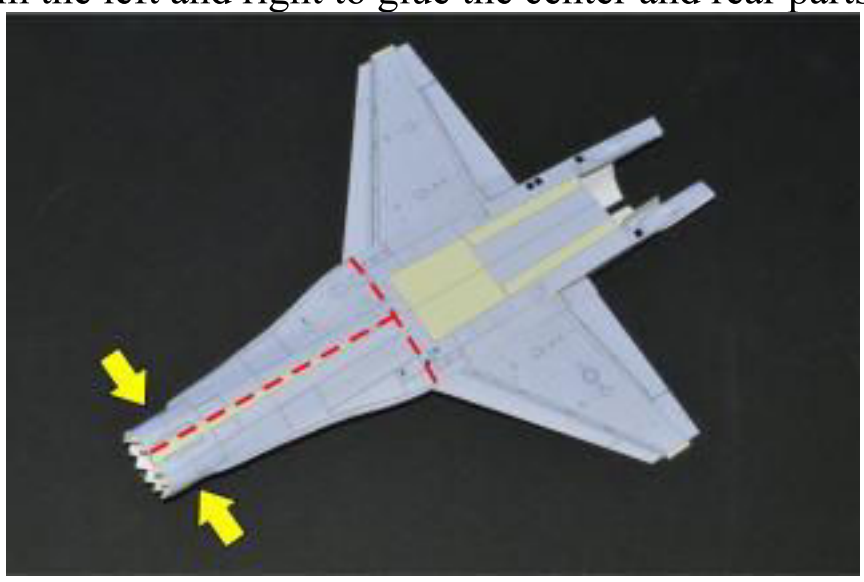
7. Cut out 10. rear fuselage middle plate, 11. fuselage front middle plate, 12. front middle plate reinforcing plate and bend them as shown in the photo. Glue the front midplate reinforcing plate to the inside of the fuselage front midplate. **In the F-16CJ** , 11. The front middle plate of the fuselage is divided into two. 12. Do not use the front middle plate reinforcing plate.



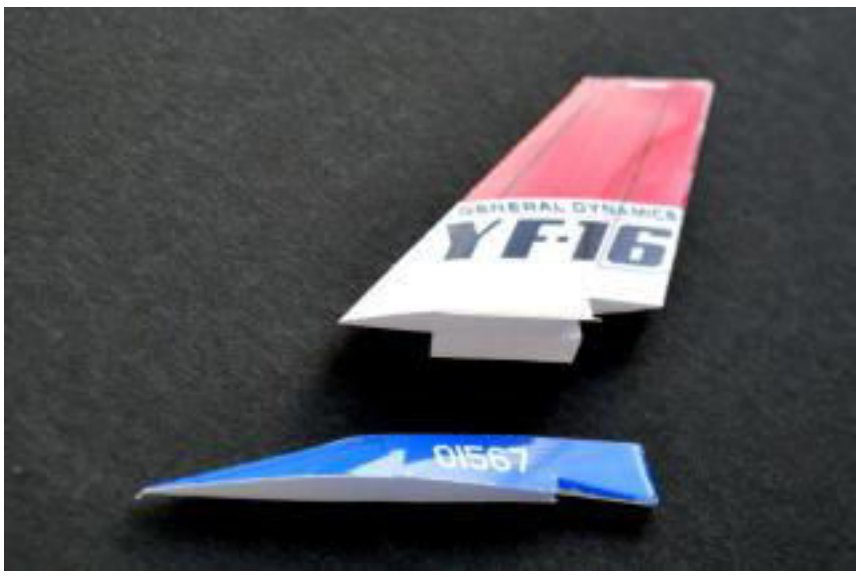
8. First 10.Attach the fuselage aft midplate to the fuselage/wing block. Next, 11. The front middle plate of the fuselage is attached, but it is a very difficult place to do because the stress of the paper is great. There are 3 points to be aware of: 1. The position of the seaweed in the area indicated by the arrow is likely to shift. The overhangs are aligned while

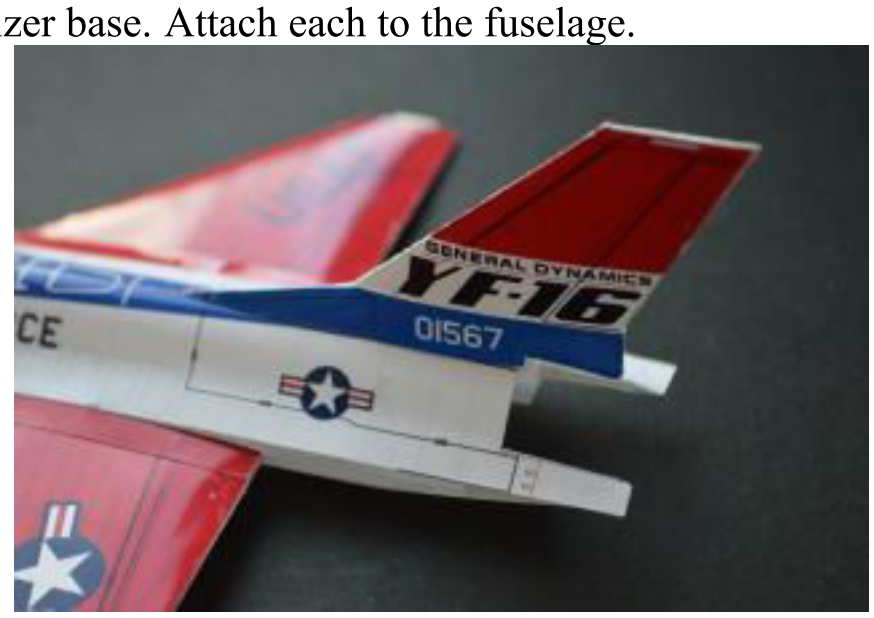
adjusting the concave shapes on the left and right sides of the body.

For the F-16CJ, first 11. Glue only the outer edge of the fuselage front middle plate. Glue the left side first. After the adhesive has hardened to some extent, press the body from the left and right to glue the center and rear parts.

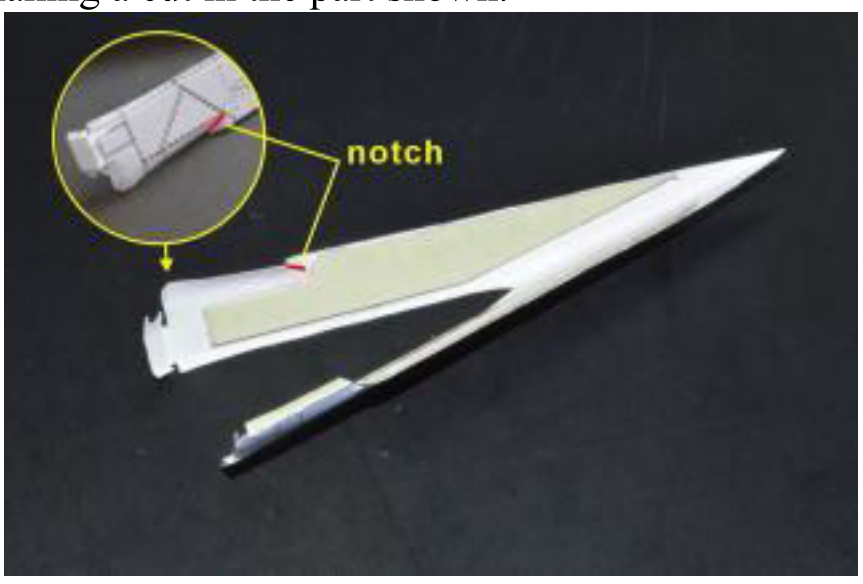


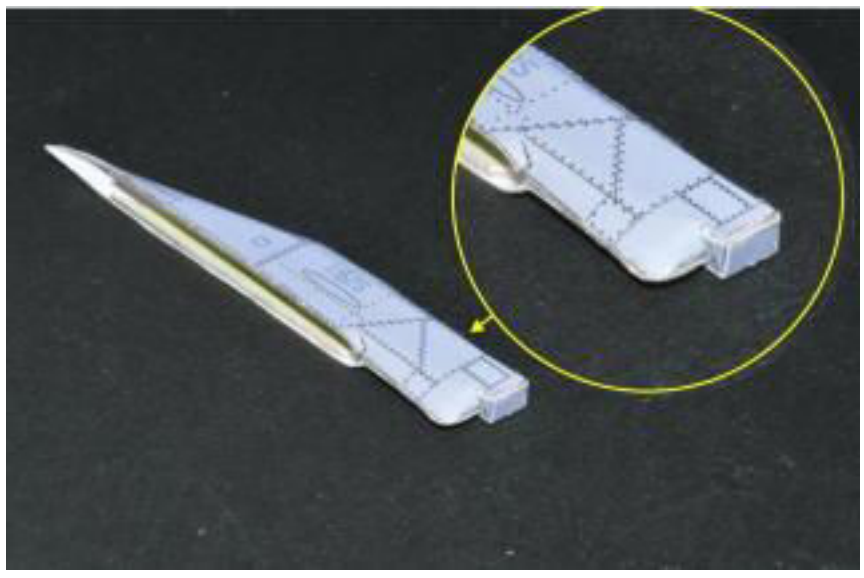
9. Assemble 13. vertical stabilizer and 14. vertical stabilizer base. Attach each to the fuselage.

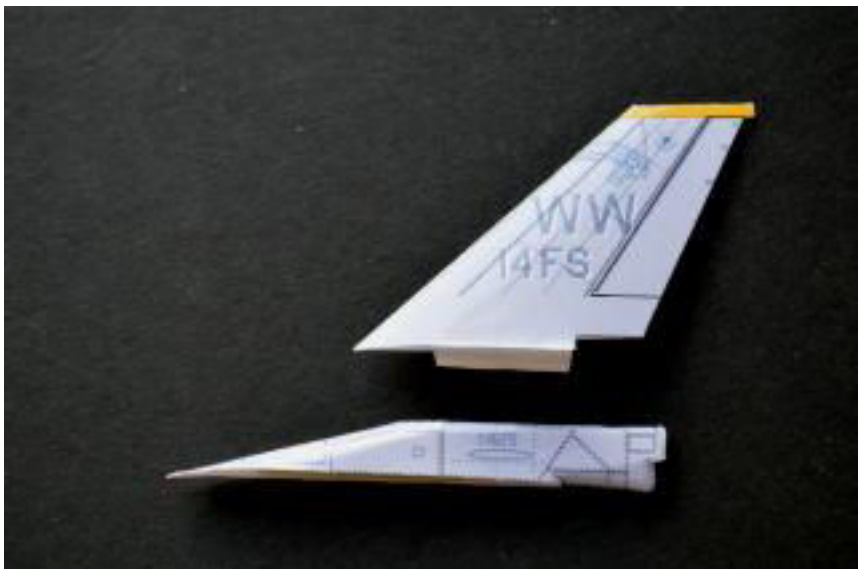


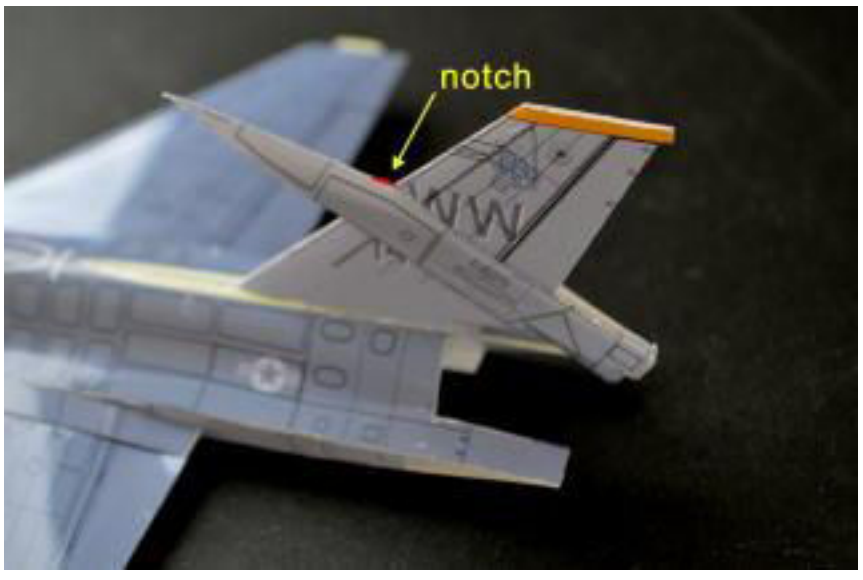


For the F-16CJ , attach 14-1. Vertical tail base reinforcing material to 14. Vertical tail base. In the example, t1.0mm thick paper is pasted for further reinforcement. 14. Make a notch in the part shown in the figure for the base of the vertical tail and round it so that it looks three-dimensional. 14.The base of the vertical tail can be attached from above by making a cut in the part shown.

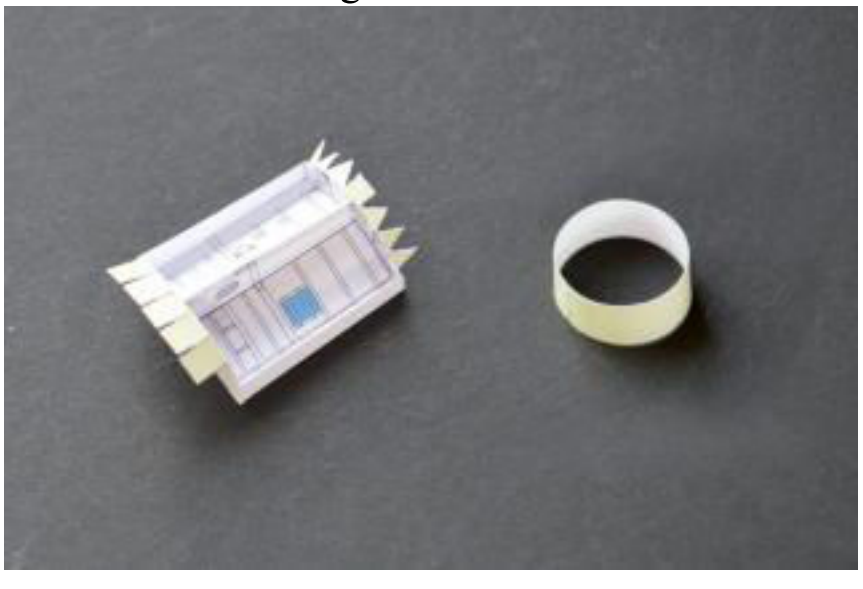






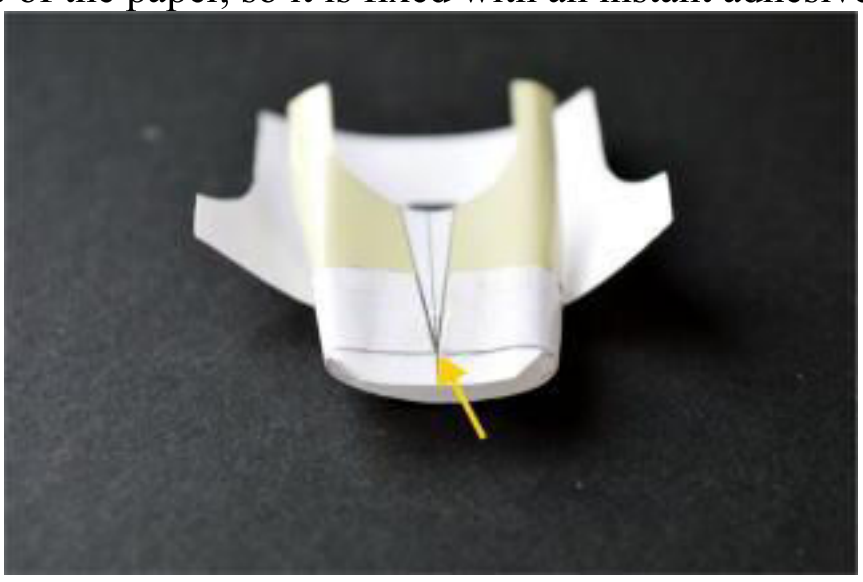


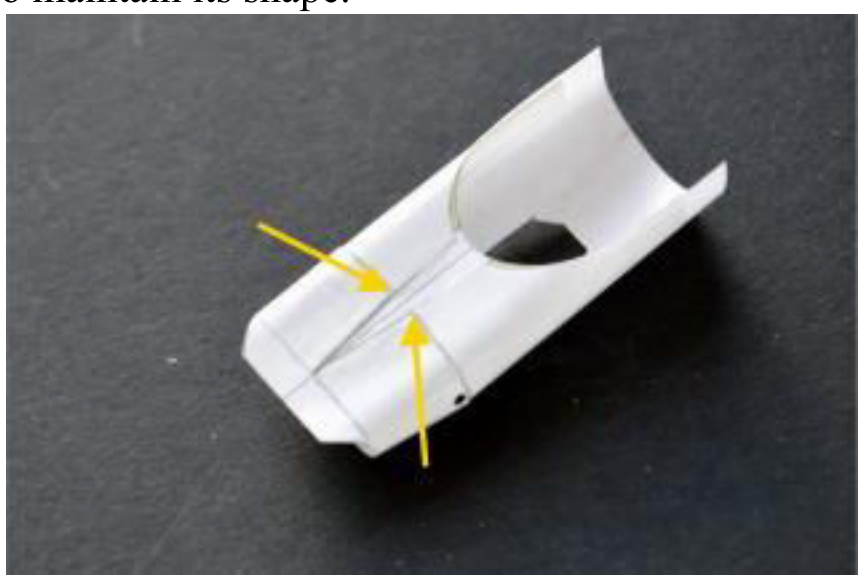
10. Attach the 15. main landing gear box bulkhead to the 14. main landing gear box. Assemble the rear fuselage ring. Attach each to the fuselage.



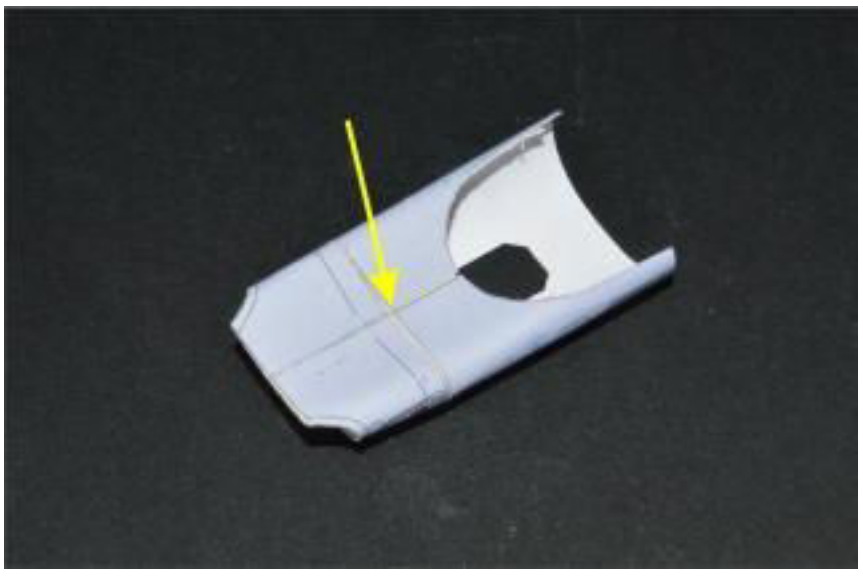
11.17.Install the lower rear part of the body.

12. Glue the 18. suction port to the 19. boundary layer plate. First, align the corner of the front half of the suction port exactly with the arrow point of the boundary layer plate and glue it. Next, glue the rear half so that the points of the arrows match. For the opening shape of the suction port, refer to Fig. 1 and adjust the bending R, etc. In particular, the boundary layer plate has a shape that is slightly curved downward, but it tends to be the opposite R due to the repulsive force of the paper, so it is fixed with an instant adhesive to maintain its shape.

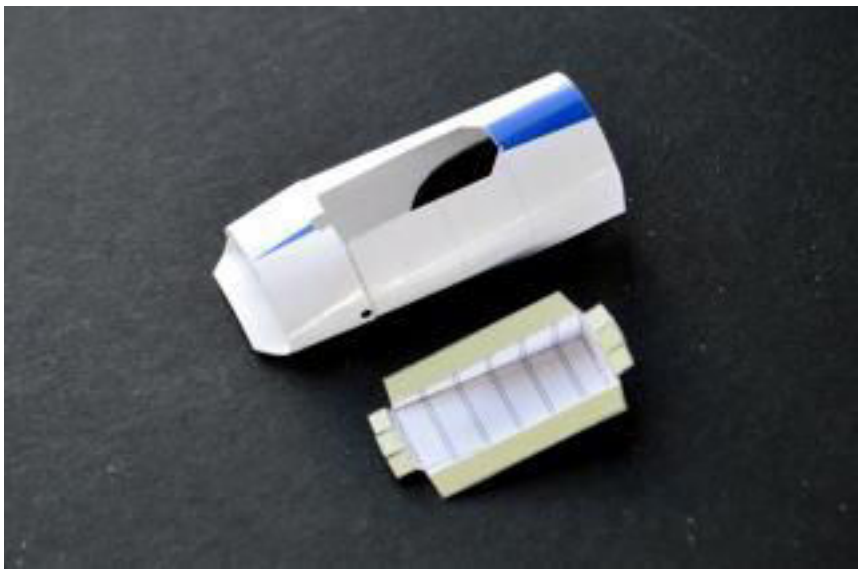




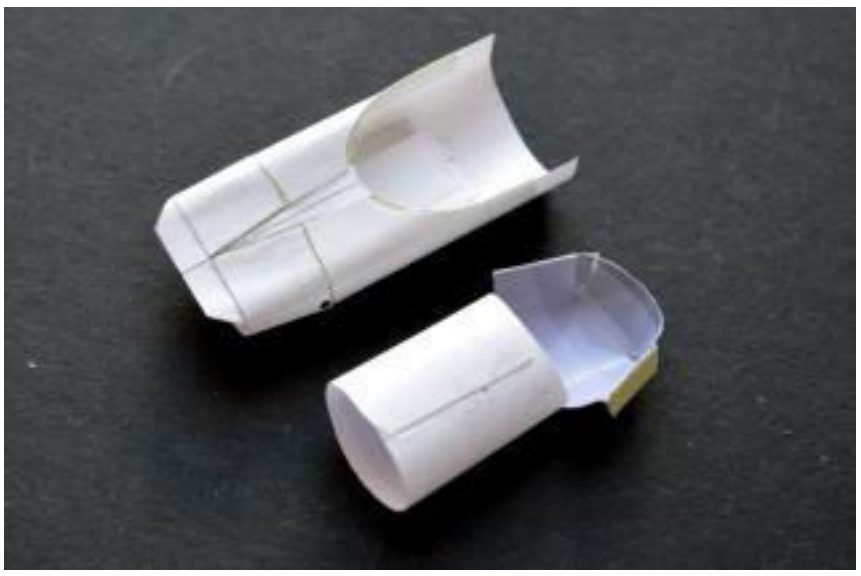
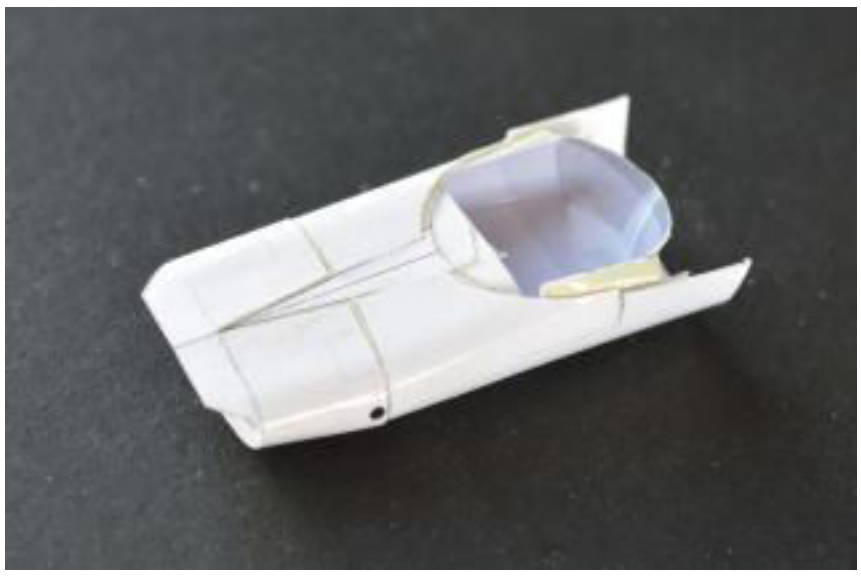
For the F-16CJ , glue so that the four corners on the left, right, front and back fit exactly at the point indicated by the arrow.



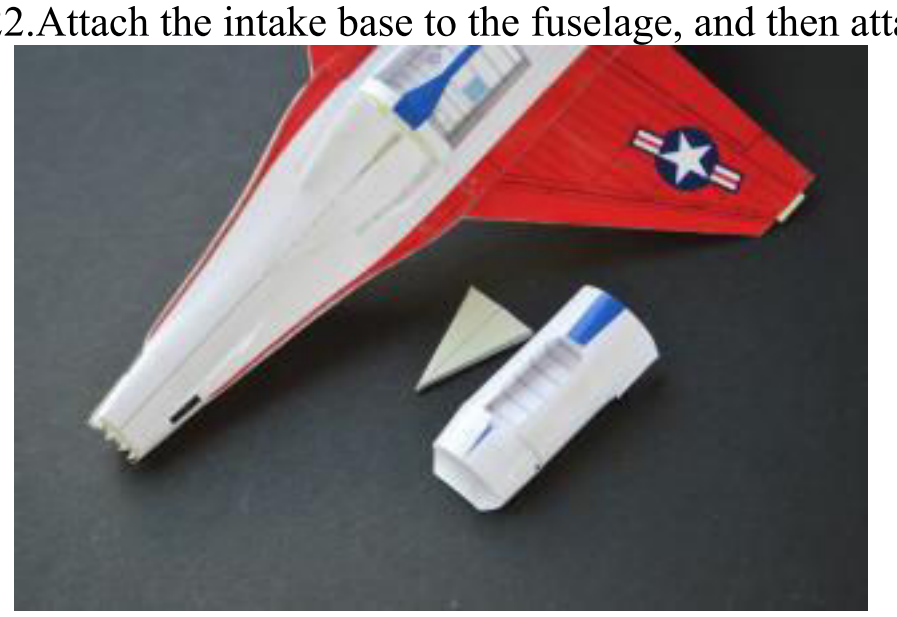
13.20. Assemble the front gear box and attach it to the inside of the intake.



14.21. Assemble the intake duct and attach it to the intake.

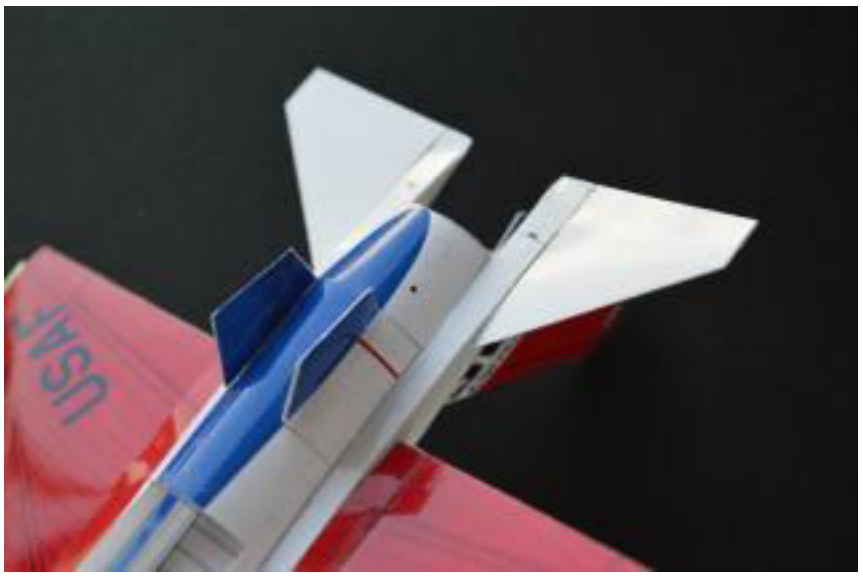



15.22.Attach the intake base to the fuselage, and then attach the 18.intake.



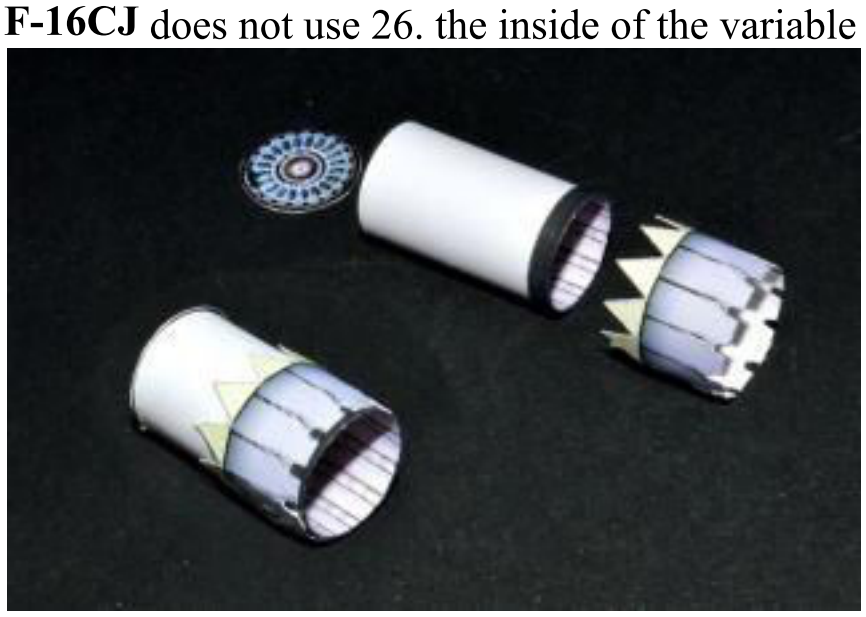
For F-16CJ, 18-1. Adhere the inside of the inlet to the inner circumference of the inlet. See Fig. 2 for the opening shape of the suction port.

16. Attach 23. left and right horizontal stabilizers and 24. left and right fuselage stabilizers to the fuselage.



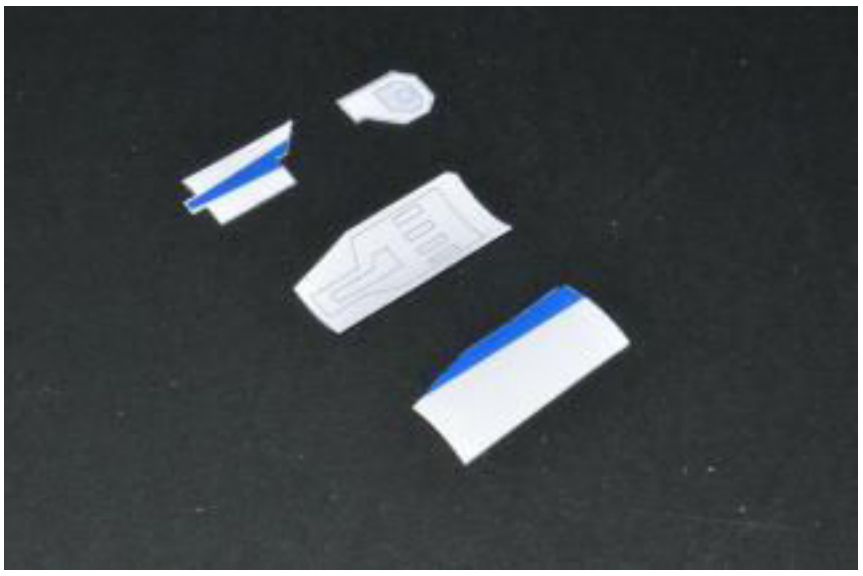
17. Assemble 25. variable nozzle, 26. inside variable nozzle, 27. afterburner, and 28. turbine and attach them to the fuselage.

The F-16CJ does not use 26. the inside of the variable nozzle.



18. Assemble the 29. radome and 30. canopy and attach them to the fuselage.

19. Assemble 31. main landing gear strut left and right, 32. main landing gear retraction link, 33. main landing gear strut cylinder, 34. main wheel, and 35. front landing gear left and right. In the example, t1mm thick paper is pasted for reinforcement. 36. Assemble the main landing gear cover and 37. front wheel cover. Attach each to the fuselage.



20.38.Missile launcher, 39.Assemble the missile and attach it to the main wing. Refer to the photo of the actual machine and install it slightly downward (twisting down). 40. Install the antenna.

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